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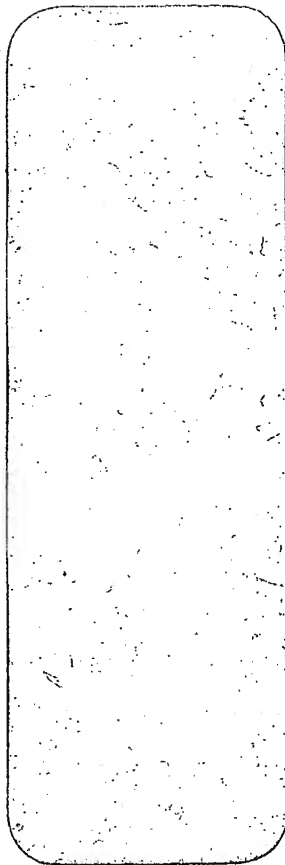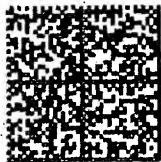IF UNDELIVERABLE RETURN IN TEN DAYS

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/014,153	11/06/2001	Timo Vicro	975.377USW1	9451

32294	7590	10/18/2005

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EXAMINER
NGUYEN, PHUONGCHAU BA

ART UNIT	PAPER NUMBER
2665	

DATE MAILED: 10/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *7-28-5 RCE*.

2a)☐ This action is **FINAL**.　　2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *34-70* is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *34-44 and 48-70* is/are rejected.

7)☒ Claim(s) *45-47* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *06 November 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☒ All　b)☐ Some * c)☐ None of:

　　　　1.☒ Certified copies of the priority documents have been received.

　　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
　　　　　　application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
　　Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

Claim Objections

1.   Claims 36-37, 53, 55 and 69 are objected to because of the following

informalities: all abbreviations should be labeled with its descriptive legends,

i.e., in claim 36 (line 2) – WCDMA (Wideband Code Division Multiple Access).

Appropriate correction is required.

Claim Rejections – 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors

Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology

Technical Amendments Act of 2002 do not apply when the reference is a U.S.

patent resulting directly or indirectly from an international application filed

before November 29, 2000. Therefore, the prior art date of the reference is

determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-

AIPA 35 U.S.C. 102(e)).

3.   Claims 34-63, 67-70 are rejected under 35 U.S.C. 102(e) as being

anticipated by Jamal (6,274,813).

Regarding claim 34:

Jamal (6,274,813) discloses a method for performing random access in a

mobile communication network (fig.1) having a base transceiver station (BS-23)

and a plurality of mobile stations (MS-30), comprising the steps of:

a) transmitting from said base transceiver station BS-23 to said plurality

of mobile stations MS-30 a parameter defining allowed access slots of at least

one physically existing random access channel (RACH) {col.6, lines 5-22, 34-

46; see also step 74-fig.3};

b) receiving said parameter at a mobile station and determining, at said

mobile station, said allowed access slots based on said parameter {col.6, lines

15-17, 34-46}; and

c) using, at said mobile station, at least one of said determined allowed

access slots for performing a random access operation to said base transceiver

station {col.6, lines 34-60}.

Regarding claim 35: Jamal further discloses wherein said parameter is

transmitted via a broadcast channel {col.6, lines 5-8}.

Regarding claim 36: Jamal further discloses wherein said broadcast channel is

the BCH channel of a WCDMA system {col.6, lines 5-8, 43-46}.

Regarding claim 37: Jamal further discloses wherein said random access is

performed via the PRACH uplink channel and the AICH downlink channel of the

WCDMA system {fig.5}.

Regarding claim 38: Jamal further discloses wherein said parameter defines a

subset of available access slots of said mobile communication network {col.7,

line 59-col.8, lines 6; fig.5}.

Regarding claim 39: Jamal further discloses wherein said subset is determined

by another parameter transmitted from said base transceiver station to said

mobile station {col.7, line 65-col.8, lines 6; col.6, lines 5-14}.

Regarding claim 40: Jamal further discloses wherein said other parameter is a

timing parameter defining a transmission timing of an uplink access slot {col.7,

lines 62-65}.

Regarding claim 41: Jamal further discloses wherein said other parameter is

transmitted via a broadcast channel {col.6, lines 5-8}.

Regarding claim 42: Jamal further discloses wherein the bit number of said

parameter is changed in dependence on said other parameter {col.7, line 65-

col.8, line 6; col.9, lines 7-10, 16-19, 42-45}.

Regarding claim 43: Jamal further discloses wherein a transmission of a

preamble signature or an acquisition indication is disabled in dependence of

the value of said parameter {col.9, lines 37-60}.

Regarding claim 44: Jamal further discloses wherein an index of an allowed

uplink access slot is calculated on the basis of the value of said parameter and

a frame number of a frame used for transmitting an uplink access slot {col.7,

line 65- col.8, line 6}.

Regarding claim 48: Jamal further discloses wherein an index of an allowed

uplink access slot is determined on the basis of the value of said parameter

irrespective of a frame number of a frame used for transmitting an uplink

access slot {col.7, line 65-col.8, line 6}.

Regarding claim 49: Jamal further discloses wherein an allowed downlink slot is

determined by adding a predetermined value to an index of a received uplink

slot {col.7, line 65-col.8, line 6}.

Regarding claim 50: Jamal further discloses wherein said predetermined value is

selected in accordance with a timing parameter defining a transmission timing

of said uplink slot {col.7, lines 59-65}.

Regarding claim 51: Jamal further discloses wherein bit values of a binary

expression of said parameter determines a combination of calculated indices

obtained for other values of said parameter, said other values corresponding to

the binary weights of said binary expression {col.9, lines 7-19}.

Regarding claim 52:

Jamal discloses a system for performing random access in a mobile

communication network, comprising:

a) a base transceiver station 10 (BS) arranged for transmitting a

parameter defining allowed access slots of at least one physically existing

random access channel (RACH) {col.6, lines 5-14, 43-50; also see col.8, lines

38-47}; and

b) a plurality of mobile stations (MS) arranged for receiving said

transmitted parameter, for determining said allowed access slots based on said

received parameter {col.6, lines 15-17, 43-46}, and for using at least one of

said determined allowed access slots for performing a random access operation

to said base transceiver station 10 (BS) {col.6, lines 34-50; also see col.8, lines

45-47}.

Regarding claim 53: Jamal further discloses wherein said network element is a

WCDMA base transceiver station 10 (BS-23, fig.1) and said mobile station (MS,

fig.1) is a WCDMA mobile station {col.6, lines 5-8, 43-46}.

Regarding claim 54:

Jamal discloses a network element (BS) for a mobile communication

network comprising a plurality of mobile stations (MS), comprising:

a) setting means (74) for setting a parameter defining allowed access

slots of at least one physically existing random access channel (RACH) {col.6,

lines 5-14, 34-46}; and

b) transmitting means (inherent at BS-23 for transmitting on BCH) for

transmitting said parameter to said plurality of mobile stations (MS-30, fig.1)

{col.6, lines 15-17, 43-50}.

Regarding claim 55: Jamal further discloses wherein said network element is a

WCDMA base transceiver station {fig.1, BS-23}.

Regarding claim 56: Jamal further discloses wherein said transmitting means

(inherent at BS-23 for transmitting on BCH) is arranged to transmit said

parameter via a broadcast channel {col.6, lines 5-8, 43-46}.

Regarding claim 57: Jamal further discloses wherein said setting means (34, 36,

38, 40) is arranged to set said parameter in dependence on a timing parameter

value defining a transmission timing of an uplink access slot in said random

access operation {col.6, lines 34-50; col.7, line 59-col.8, line 6}.

Regarding claim 58:

Jamal discloses a mobile station for a mobile communication network

having at least one network element (BS-23, fig.1) allowing a random access

operation, comprising:

a) receiving means (32) for receiving from said network element (BS) a

parameter defining allowed access slots of at least one physically existing

random access channel (RACH) for said random access operation {col.6, lines

43-50; also, 76, fig.3};

b) determining means (34, 36, 38, 40) for determining said allowed

access slots based on said parameter received from said network element (BS)

{col.6, lines 43-60; col.8, lines 43-47; also, 80, fig.4}; and

c) transmitting means (56) for transmitting a random access message to

said network element (BS) using at least one of said determined allowed access

slots {col.6, lines 34-60; col.8, lines 43-47; also, 90, fig.4}.

Regarding claim 59: Jamal further discloses wherein said receiving means (32)

is arranged to receive said parameter via a broadcast channel {col.6, lines 5-8,

43-46}.

Regarding claim 60: Jamal further discloses wherein said determining means

(34, 36, 38, 40) is arranged to determine said allowed access slots on the basis

of said received parameter and a timing parameter received via said broadcast

channel {col.6, lines 34-50; col.7, line 59-col.8, line 6}.

Regarding claim 61: Jamal further discloses wherein said determining means

(34, 36, 38, 40) is arranged to calculate an index of an allowed uplink access

slot on the basis of the value of said received parameter and a frame number of

a frame used for transmitting an uplink access slot {col.7, line 65- col.8, line 6}.

Regarding claim 62: Jamal further discloses wherein said determining means

(34, 36, 38, 40) is arranged to determine an index of an allowed uplink access

slot on the basis of the value of said parameter irrespective of a frame number

of a frame used for transmitting an uplink access slot {col.7, line 65-col.8, line

6}.

Regarding claim 63:

Jamal further discloses wherein a selection means is provided for

randomly selecting from allowed access slots determined by said determining

means an uplink access slot to be used for transmitting a preamble of said

random access message {col.8, lines 48-60}.

Regarding claim 67:

Jamal discloses a method for performing random access in a mobile

communication network, comprising the steps of:

a) (MS-30, fig.1) receiving a parameter defining allowed access slots of at

least one physically existing random access channel for a random access

operation (col.6, lines 43-60);

b) (MS-30) determining said allowed access slots based on said

parameter (col.6, lines 43-60; col.7, line 65-col.8, lines 7 & 38-47); and

c) (MS-30) transmitting a random access message using at least one of

said determined allowed access slots (col.8, lines 43-47).

Regarding claim 68:

Jamal discloses a method for performing random access in a mobile

communication network, comprising the steps of:

a) receiving information about a set of available uplink access slots of a

random access channel (col.6, line 34-60; wherein the parameters could have

been a set of available uplink access slots of Random Access Channel (RACH)—

emphasis added);

b) deriving available uplink access slots, in a next full access slot set, for

the set of available uplink access slots (col.6, lines 43-60); and

c) randomly selecting one access slot among the available uplink access

slots for performing a random access procedure (col.6, lines 46–60; col.8, lines

43–57).

Regarding claim 69:

Jamal discloses a method for performing random access in a mobile

communication network, comprising the steps of:

a) (MS–30) receiving a set of available RACH sub–channels (access slots in

RACH), a RACH sub–channel defining a sub–set of a total set of uplink access

slots (fig.5);

b) deriving available uplink access slots, in a next full access slot set, for

the set of available RACH sub–channel (fig.5); and

/

c) randomly selecting one access slot among the available uplink access

slots for performing a random access procedure (fig.5, col.6, lines 46–50).

Regarding claim 70:

Jamal discloses a method for performing random access in a mobile

communication network, comprising the steps of:

a) receiving an access parameter message sent on a broadcast channel,

the access parameter message defining allowed transmission slots in which

random access channel transmissions are limited to occur, where the allowed

transmission slots are dictated by slot offset and slot duration parameters

(col.6, lines 43-50);

b) calculating (by dynamically allocating) an allowed transmission slot

based on the slot offset and slot duration parameters (col.6, lines 47-65; also

col.7, line 59-col.8, lines 6, 43-47); and

c) transmitting a random access message using the allowed transmission

slot (col.8, lines 43-47).

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for

all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5.   Claims 64-66 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Jamal (6,274,813) as applied to claims 34-63 above, and further in view of

Gustafsson (6,643,275).

Regarding claim 64:

Jamal discloses in figure 5 access slots but Jamal does not explicitly

discloses wherein consecutive preambles are transmitted a predetermined

number of access slots apart. However, in the same field of endeavor,

Gustafsson (6,643,275) further discloses wherein consecutive preambles are

transmitted a predetermined number of access slots apart {fig.3; col.3, lines 3-

11}. Therefore, it would have been obvious to an artisan to apply Gustafsson's

teaching to Jamal with the motivation being to provide in detail the well known

feature of a random access channel with a separate preamble and data portion

and to use the preamble by base station to detect MS attempting the random

access channel.

Regarding claim 65:

Jamal further discloses wherein said predetermined number depends on a

timing parameter received by said receiving means {90, fig.4; col.7, line 59-

col.8, line 6}.

Regarding claim 66:

Jamal further discloses wherein said selection means is arranged to

perform said random selection any time a preamble needs to be transmitted

{90, fig.4, col.7, lines 57-65}.

Allowable Subject Matter

6.   Claims 45-47 are objected to as being dependent upon a rejected base

claim, but would be allowable if rewritten in independent form including all of

the limitations of the base claim and any intervening claims.

Response to Arguments

7.   Applicant's arguments filed 9-17-4 have been fully considered but they

are not persuasive.

A/. Applicant argued on page 13 that Jamal fails to teach transmitting a

parameter defining allowed access slots of at least one physically existing

random access channel used by the base transceiver station and a mobile

station to the mobile station and determining the allowed access slots at the

mobile station based on the parameter.

In reply, applicant is directed to column 6, lines 34-42 wherein mobile

station 30-fig.1 uses an uplink channel RACH (physically existing random

access channel) to transmit data a base station; and column 7, line 57-column

8, line 6 in Jamal wherein the mobile station providing information to the base

station that is specific to the mobile station and specific to this particular

access being made by the mobile station, e.g., the specific time or time slot at

which the access is made and or specific information conveyed for that access

such as access reference or signature. Depending upon the specific scrambling

code selection, generation, or determination procedures employed, both the

mobile station and the base station use one or more of the mobile specific

access parameters and stored overhead type parameters to generate the uplink

scrambling code allocated to the traffic information dedicated (at least

temporarily) to the mobile which is thereafter used to scramble or descramble

communication over that connection. Also, in column 8, lines 48-57 in Jamal

wherein each random access slot include the identification of the mobile and

other parameters such as a particular signature selected by the mobile from a

limited set of signatures used to further decrease the probability of collision on

the access channel. That way even if pluralities of mobiles select the same

access slot, they still can be individually resolved at the base station if they

have chosen different signatures. The mobile station typically selects the

access slot AS and signature for the uplink common control channel frame

transmission pseudo-randomly.

8.   Any inquiry concerning this communication or earlier communications

from the examiner should be directed to Phuongchau Ba Nguyen whose

telephone number is 571-272-3148. The examiner can normally be reached on Monday-Friday from 10:00 a.m. to 2:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DUC HO
PRIMARY EXAMINER

10—14—05

Phuongchau Ba Nguyen
Examiner
Art Unit 2665